

# POHUTUKAWA

## FACT SHEET



*(This fact sheet was compiled from information from Dr Philip Simpson's paper Biodiversity and pohutukawa.)*

## Mainland Pohutukawa (*Metrosideros excelsa*)

The mainland pohutukawa is found all over the country, although its natural growing range is north of a line stretching from New Plymouth to Gisborne. It prefers warm, drier areas close to the sea.

### Roots

Pohutukawa have the ability to sprout root systems as and where needed. These adventitious roots form out of trunks and branches; and are able to grow in air over surfaces as they search for crevices, pockets of soil and moisture.

### Wood

Dense and strong, as needed to withstand wind damage and drought; hard, very heavy, dark red heartwood; slow growing.

### Bark

Rough and stringy forming a medium-thick, dry covering capable of protecting the tree from drought; and excellent surface for its own aerial roots and the roots of epiphytes (an epiphyte stores water for itself and its host).



## About Project Crimson

It seems hard to believe but 25 years ago the future of pohutukawa looked bleak. Possums were out of control and in some parts of the country up to 90% of coastal pohutukawa stands were gone. Led by a bunch of enthusiastic and committed volunteers, Project Crimson set out to replant areas of the Northland coastline that were depleted of pohutukawa. Such was the success that over the years that mandate broadened to a national focus, to include rata, and more recently a wider ecosystem approach.

At the heart of Project Crimson however remain our four hero species: mainland pohutukawa and the tree rata – northern, southern and Bartlett's - as these are the most threatened by possums and people. Project Crimson advocates for these species and has undertaken extensive research into the health of *Metrosideros* (the species to which pohutukawa and rata belong).

## Leaves and shoots

4 – 7 cm in length. Leaf can be very rounded or bluntly pointed.

Dormant leaf and floral buds protected by bud scales against damage from cold, salt and abrasion. Leaves live for two years and can be quickly replaced if lost in a wind storm.

Shoots divide into two branches from opposite, upper buds so that the system spreads widely.

Leaves are hairy when young. When mature the hair on the upper surface is replaced with a tough, shiny coat of wax. This protects against drought, salt, and glare. Dense soft hairs remain underneath to reduce water loss from the leaf's tiny pores.

## Flower colour

Pinkish crimson to brownish red, a number of colour variations have been recorded; including apricot, salmon, yellow and pink.

Flowers between November and February depending on location and weather patterns.

## Stamen

4 – 7 cm.

## Fruit/seed capsules

Small capsule with up to 30 in a bunch. Hairy, which gives them a grey colour in the juvenile stage.

Capsule opens to enable wind dispersal of seed. Seeds are small for easy dispersal and entry into rock crevices, an ideal strategy for a rock colonising, coastal plant.

## Mature trees

Mainland pohutukawa grows to 20m high with up to a 35m wide crown.

The massive spreading crown; wider than tall, moulds to coastal wind and slope and spreads weight over unstable ground. The canopy shelters root systems on bare rock.



## Growth rate

Seedlings grow faster than older trees. In a very fertile environment with good moisture and plenty of room, young pohutukawa grow very quickly (at around 30cm per year in height and 5-10cm in diameter), often having quite a bushy form due to multi stems and vigorous lower stem growth, whereas older trees gain around 10cm in height a year and 2mm in diameter.

On low fertility sites, almost solid rock, trees which maybe 100 years old may not exceed one or two meters in height.

Will not grow well in wet or bog areas.

## How old

To 1000 years.

## Ecosystem

### Birds:

Kaka, tui and bellbirds feed on nectar. Many birds nest in the hollow trunks.

